What is claimed is:

1. A light-emitting device comprising:

a plurality of electrode layers, including an anode layer and a cathode layer;

an electro-luminescent organic layer disposed between the anode and cathode layers; and

a poly-siloxane insulating structure separating the electro-luminescent organic layer into a plurality of light-emitting elements.

2. The device of claim 1 further comprising at least one other organic layer disposed adjacent to the electro-luminescent organic layer, the at least one other organic layer configured to perform one or more of the following functions: hole injection, hole transportation, electron injection, and electron transportation.

3. The device of claim 1 wherein the poly-siloxane insulating structure separates the electro-luminescent layer into a plurality of pixels.

4. The device of claim 1 wherein the poly-siloxane insulating structure comprises a thin sheet of poly-siloxane material having a plurality of apertures, and wherein each of the anode layer and cathode layer comprises a plurality of electrode strips arranged such that the anode layer electrode strips and the cathode layer electrode strips coincide at regions corresponding to apertures of the poly-siloxane insulating structure.

5. The device of claim 4 wherein at least one electrode layer is configured to independently address at least one aperture of the poly-siloxane insulating structure as a

display pixel, and wherein the at least one electrode layer is further arranged in an active matrix configuration.

6. The device of claim 1 wherein the poly-siloxane insulating structure forms a bank structure that insulates the plurality of light-emitting elements from each other.

7. The device of claim 1 further comprising one or more insulating strips on the poly-siloxane insulating structure, and wherein at least one insulating strip comprises an overhanging portion or a base portion or both.

8. The device of claim 7 wherein the at least one insulating strip comprises poly-siloxane material in one or both of the overhanging portion and the base portion.

9. A method of constructing a light-emitting device, the method comprising:

forming a first electrode layer on a substrate;

forming on the first electrode layer a poly-siloxane bank structure having apertures;

depositing one or more organic layers into the apertures of the poly-siloxane bank structure; and

forming a second electrode layer such that the one or more organic layers deposited into the apertures are disposed between the first and second electrode layers.

10. The method of claim 9 wherein depositing one or more organic layers comprises depositing an electro-luminescent organic layer.

11. The method of claim 10 wherein depositing one or more organic layers comprises depositing at least one other organic layer disposed adjacent to the electro-

luminescent organic layer, wherein the at least one other organic layer comprises an organic layer configured to perform one or more of the following functions: hole injection, hole transportation, electron injection, and electron transportation.

12. The method of claim 11 wherein the at least one other organic layer comprises a conductive polymer.

13. The method of claim 9 further comprising patterning the poly-siloxane bank structure to separate the light-emitting device into a plurality of pixels.

14. The method of claim 9 wherein forming the poly-siloxane bank structure comprises forming a thin sheet of poly-siloxane material having a plurality of apertures, each aperture corresponding to an individual light-emitting element.

15. The method of claim 9 wherein each of the first electrode layer and the second layer are formed as a plurality of electrode strips arranged such that the first electrode layer strips coincide with the second electrode layer strips at regions corresponding to the poly-siloxane bank structure's apertures.

16. The method of claim 9 wherein forming the first electrode layer further comprises arranging the first electrode layer to independently address at least one aperture of the poly-siloxane bank structure.

17. The method of claim 16 wherein arranging the first electrode layer further comprises configuring the first electrode layer as an active matrix.

18. The method of claim 9 wherein depositing the one or more organic layers comprises one or more of spin-casting, dip-coating, screen printing, flexo printing, and ink-jet printing.

19. The method of claim 9 wherein the poly-siloxane bank structure is formed before the one or more organic layers are deposited.

20. The method of claim 9 wherein one or more organic layers are deposited before the poly-siloxane bank structure is formed.

21. The method of claim 9 further comprising forming one or more insulating strips on the poly-siloxane bank structure.

22. The method of claim 21 wherein the one or more insulating strips are formed on the poly-siloxane bank structure between apertures.

23. The method of claim 22 wherein at least one insulating strip comprises an overhanging portion or a base portion or both.

24. The method of claim 23 wherein the at least one insulating strip comprises poly-siloxane in one or both of the overhanging portion and the base portion.

25. An organic light-emitting device (OLED) comprising:

a plurality of light-emitting elements, each light-emitting element comprising an electro-luminescent material disposed between electrode elements; and

at least one structure comprising poly-siloxane material, wherein the structure is configured to separate elements of the OLED.

26. The OLED of claim 25 wherein the at least one structure comprises a poly-siloxane bank structure configured to separate light-emitting elements from each other.

27. The OLED of claim 26 wherein the poly-siloxane bank structure includes apertures into which light-emitting elements are arranged.

28. The OLED of claim 26 wherein the poly-siloxane bank structure physically and electrically insulates the light-emitting elements from each other.

29. The OLED of claim 26 further comprising one or more insulating strips configured to separate electrode elements of the OLED.

30. The OLED of claim 29 wherein at least one insulating strip comprises an overhanging portion or a base portion or both.

31. The OLED of claim 29 wherein the at least one insulating strip comprises poly-siloxane material in one or both of the overhanging portion and the base portion.

32. The OLED of claim 25 wherein the at least one structure comprises one or more insulating strips configured to separate electrode elements of the OLED.

33. The OLED of claim 32 wherein at least one insulating strip insulates neighboring electrode elements from each other.